

Job Title: Senior Mechanical Engineer – CNC Grinding Industry

About Us:

Campbell Grinder Company is a leader in high-precision engineering and advanced CNC grinding solutions, specializing in delivering high-quality machines and innovative technology to our clients in the aerospace, defense, and machinery industries. We are seeking an experienced Senior Mechanical Engineer with a specialty in the design and development of CNC grinding machines to join our dynamic team.

Position Description:

The Senior Mechanical Engineer is responsible for the design of high-precision grinding machines from concept through troubleshooting after assembly. The Senior Mechanical Engineer is responsible for initiating concept designs based on sales handoff and customer feedback, communicating those design concepts to internal engineering team members through design reviews, developing those designs on 3D modeling software, and managing those design projects to completion.

Essential Job Duties and Responsibilities:

- **Design and Development** Develop mechanical designs for CNC grinding machines, including components such as spindles, linear guides, dressers, bearings, and structural frames.
- **Innovation in Grinding Technology** Enhance grinding machine performance through innovative design improvements, focusing on areas such as thermal stability, vibration dampening, and tool life within budget and meeting customer timelines.
- **CAD and Simulation** Set up complex models, drawing, assemblies, etc. and when applicable perform simulations to validate the performance and durability of machine components.
- **Prototyping and Testing** Oversee the prototyping, assembly, and testing of new designs, and refine machine components based on test results to ensure optimal performance.
- **Collaboration** Work closely with Electrical Engineering and Applications Engineering teams to integrate mechanical designs with control systems, ensuring seamless CNC machine functionality. Work closely with purchasing team members and communicate with vendors and customers efficiently and professionally.
- **Mentorship & Oversight** Provide guidance and mentorship to junior engineers by supporting their development in design principles, systems knowledge, and software tools. Review and validate their drawings to ensure accuracy, compliance with standards, and sound engineering practices. Support generation of project plans and timelines; ensure milestones are met in the relevant area of responsibility for the project.
- **Technical Support** Provide technical expertise and troubleshooting support during the assembly and commissioning of machines on-site or at client facilities. Support of the Service department for field repairs.
- **Continuous Improvement** Identify and implement continuous improvement initiatives to reduce costs, improve quality, and increase productivity of both the CNC grinding equipment and engineering department.
- **Travel** Travel when necessary to customers' sites or vendor facilities.
- The above description in no way states that these are the only duties to be performed by someone with this job title.

Knowledge & Necessary Skills Required:

- Proficiency in Solidworks 3D CAD software for modeling, assemblies, drawings, and BOM creation and related standards. Familiar with AutoCAD 2D.



- Basic Finite Element Analysis (FEA) experience required, advanced expertise is a plus
- Exceptional technical knowledge, problem-solving skills, attention to detail, and reasoning ability.
- Understands engineering concepts and machine systems.
- Knowledge of design for manufacturability.
- Must be self-motivated and able to manage multiple projects or tasks.
- Working knowledge of Microsoft Office applications.
- Knowledge of machine tool applications and processes.

Education & Qualifications Required:

- 5+ years practical experience in mechanical machinery or capital equipment design, with a focus on CNC grinding machinery or similar high-precision equipment.
- Bachelor's degree in mechanical engineering, required, Master's degree preferred. Equivalent industry experience of 16+ years may be used in lieu of a university degree

Company Benefits:

- Relocation assistance
- Company Matched 401(k)
- Health, Life, Dental and Vision Insurance on day one
- Life & AD&D Insurance
- Flexible Spending Account
- PTO Time
- Bonus Program
- Wellness Reimbursement

